DETAILED ACTION

Claim Rejections - 35 USC § 102/35 USC § 103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being obvious over Futami et al (2008/0281015, effective filing date 11/29/2004).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

Art Unit: 1796

inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Futami et al sets forth photocurable compositions and optical parts obtained thereof. Said composition comprises (A) at least one (meth) acrylate(s) having the following structures:

$$\mathbb{R}^{2} \longrightarrow \mathbb{R}^{3} \longrightarrow \mathbb{R}^{3}$$

definitions for R1 and R3 can be found in the abstract and section [0007], (B) a (meth) acrylate having 3 or more functional groups excluding the (meth) acrylates of (A), (C) a radical photoinitiator, and (D) a polycarbonate polyol having a specific hydroxyl value; wherein the composition comprises 5-50 wt% of the total acrylic components are methacrylate compounds. In addition, the composition can comprise other components, such as other unsaturated monomers, a urethane (meth) acrylate oligomer in an amount from 4.99 to 40 wt%, and customary additives that do not affect the overall compositional properties—see [0030], [0032],

Application/Control Number: 10/599,527 Page 4

Art Unit: 1796

and [0035]. The overall composition once cured should having a refractive index of 1.55 or more at 25 0C and a softening point of 40 0C or more--see [0039]. Per examples, Futami et al sets forth compositions comprising approximately 60 wt% of compounds having the formulas as set forth above, 5 wt% of a tri-functional (meth) acrylate compound, 3 wt% of a photoinitiator, 2 wt% of a polycarbonate polyol, 9.5 wt% of a urethane (meth) acrylate oligomer, and 20 wt% of other (meth) acrylate functional compounds. Wherein, said other (meth) acrylate compounds are 1, 9-nonanedoil diacrylate and acryloylmorpholine. The examiner deems that it would have been obvious to replace either both of the other (meth) acrylate compounds or the lauryl acryloylmorpholine with an N-vinyl compound, such as N-vinylpyrrolidone or N-vinylcaprolactam since these are disclosed as equivalent in the teachings found in [0030], wherein an ordinary artisan would still having a reasonable expectation of obtaining a photocured article having the disclosed properties. Wherein when replaced the compositions of example 1 and 2 would comprise from approximately 20 to 15 wt% of a mono-functional monomer of which the homopolymer has a Tg of 150 C or more. Futami et al sets forth said cured composition is useful for forming optical parts, such as prism lens sheets. Therefore claims 5-6 are read in the reference.

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US2005/0261392 to Futami et al (different inventive entity) sets forth similar photocurable compositions for optical parts. The primary difference is Futami et al while teaching methacrylate and acrylate compounds does not expressly set forth the acrylic composition must have at least 5-50 wt% of methacrylate compound and 4-40 wt% of a monofunctional compound whose homopolymer has a Tg of 150 0c or more. And said composition when cured has a refractive index of 1.53 or more. Said reference is silent with regard to the softening point.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/ Primary Examiner Art Unit 1796

SMc